

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-008688**Date Inspected:** 23-Aug-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai,China**CWI Name:** Lv Li Qing / Shen Fu You**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Assembly**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Tim McClendon was present during the time noted above for observations relative to the work being performed.

This QA Inspector randomly observed the following work in progress:

OBG Bay No. 14

This Quality Assurance Inspector (QA) observed that the contractor has removed base metal on deck panel diaphragm on assembly 9AE SEG 050 SSD19 PP73 weld number 004. There are twenty – one (21) locations where ZPMC found tacks with crack like linear indications on all or part of the 21 tack welds, using the magnetic particle (MT) inspection method. In an attempt to remove these tack welds using air carbon arc gouging a large portion of base metal was removed (minimum 4mm / maximum 10mm) on all 21 areas. An Incident report will be written on this issue. See photographs for more information.

This Quality Assurance Inspector (QA) observed that the contractor appears to have deviated from the weld joint design specified on the approved drawings. The contractor appears to have changed the weld joint from a Fillet Weld to a Complete Joint Penetration (CJP) weld with a backing weld. This deviation was performed without the Engineers approval. According to the ZPMC QC inspector, the weld design was changed in order to compensate for a joint root opening in excess of 5mm. This condition exists in the following locations; OBG segment 9AE @ PP072 for weld joining SEG 050 SSD19 PP72 weld 004/005 and OBG segment 9AE @ PP073 for weld joining SEG 050 SSD19 PP73 weld 004/005. An incident report will be written on this issue.

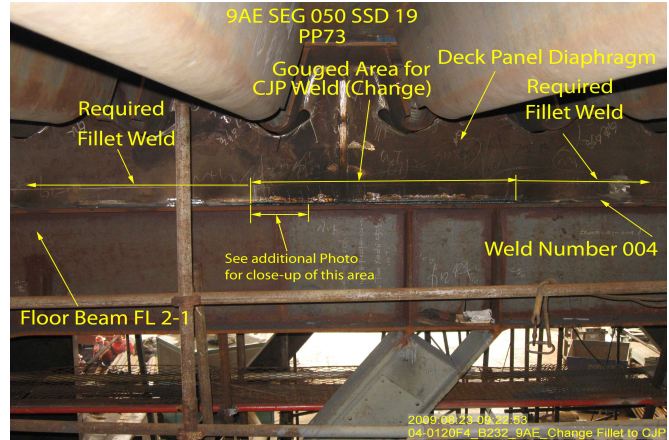
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# WELDING INSPECTION REPORT

( Continued Page 2 of 2 )

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Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



## Summary of Conversations:

No relevant conversations spoken on this date.

## Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang (15000422372), who represents the Office of Structural Materials for your project.

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**Inspected By:** McClendon, Timothy

Quality Assurance Inspector

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**Reviewed By:** Patterson, Rodney

QA Reviewer